

**A NEW LARVAL NEOTROMBIDIUM (ACARINA,  
LEEUEWENHOEKIIDAE) FROM BAT GUANO**

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Fig. 1

**SYNOPSIS**

A new species of larval *Neotrombidium*, *N. gracilipes* (Acarina, Leeuwenhoekiiidae) is described from a single specimen obtained from bat guano from Fig Tree Cave, Wombeyan, New South Wales.

***Neotrombidium gracilipes* sp. nov.**

Fig. 1

*Holotype larva*: Shape, slightly engorged, broadly oval. Length of idiosoma 960 $\mu$ , width 580 $\mu$ .

*Dorsum*: With the scutum triangular with a broadly rounded anterior apex, furnished with three pairs of ciliated setae and a pair of fine filamentous sensillae shortly and sparsely ciliated distally, no trace of a crista, the lateral margins do not run in a straight and oblique line, but are roughly longitudinal and parallel from the antero-median setae to the antero-lateral setae which they contour, and then similarly to the postero-lateral setae which they outwardly surround, posterior margin lightly convex. The antero-median setae, AM, and postero-lateral setae, PL, are fairly short and blunt, but the antero-lateral, AL, are long and tapering, the sensillae are shortly ciliated distally and arise from fairly large alveolae a little in front of PL. Dorsal surface posterior of the scutum with 31 pairs of tapering finely ciliated setae to 60 $\mu$  long and arranged in irregular transverse rows of 4 to 6 setae. The Standard Data in micra are as follows: AW 29, LW 52, PW 89, SB 38, ASB 87, PSB 20, SD 107, AM-AL 35, AL-PL 70, AM 41, AL 64, PL 35, Sens. 90, SW 96.

*Venter*: As figured; coxae I and II separated by the width of the urstigma, all coxae with only one pair of slender ciliated setae, between coxae I with one pair of setae situated just off the inner margins of coxae, a single pair of setae between coxae III and posterior coxae III with 10 pairs of setae, all coxae with slight porosity.



Fig. 1. *Neotrombidium gracilipes* sp. nov. Larva. A. dorsum, B. venter, C. dorsal scutum, D. mandible, E. palp, F. tibia and tarsus, leg I., G. same of leg III.

Mandibles (fig. D) long and narrow, with strong simple cheliceral blade. Palpi slender as figured, tibial claw bifid and tarsus small. Legs unusually slender, I and II  $526\mu$  long, III  $620\mu$ . Tibia and tarsi about 8 times longer than high, all tarsi with a single claw, tarsi I  $154\mu$  long by  $17\mu$  high, without any solenidia as far as can be seen, tibia I  $99\mu$  long, tibia and tarsi III as figured, tarsi  $168\mu$  long by  $17\mu$  high, and tibia  $128\mu$  long.

*Locality:* A single specimen from bat guano from Fig Tree Cave, Wombeyan, New South Wales, 21st August 1960.

*Remarks:* This species differs from the other described larvae of *Neotrombidium*, *barringtonense* Hirst, *tenuipes* (Wom.) and *tricuspidum* Borland, in the very slender legs. It also differs from the first larva to be described, *barringtonense* (Southcott, 1954) in that coxae I and II are separated by the width of the urstigma, as is also the case in *tenuipes* and *tricuspidum*. These coxae are also similarly separated in *Monunguls streblida* Wharton, the genus of which Southcott 1954 synonymised with *Neotrombidium*, but which the writer has shown in a current paper on other grounds to be valid. It seems therefore that the separation or otherwise of coxae I and II is not of generic importance.

Adults of a new species of *Neotrombidium*, *N. gracilare* Wom. and described in a current paper (Trans. Roy. Soc. S. Austr., Adelaide, 1962) are known from bat guano from other bat caves in Eastern Australia and it is probable that the larva described above is that of *N. gracilare*. The occurrence of two different species of *Neotrombidium* in such a localized specialized biotope as bat guano seems extremely unlikely. However, until the larva and adult can be correlated by rearing, a new specific name is proposed.

#### REFERENCES

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